

## Message

**From:** Schneider,, Shelley- NDEQ [/O=NPPD/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=SHELLEYSCHNEIDER]  
**Sent:** 4/19/2011 4:55:06 PM  
**To:** Citta Jr., Joseph L. [jlcitta@nppd.com]; Reid,, Brad- NDEQ [brad.reid@nebraska.gov]  
**CC:** Dodson, Joshua [joshua.dodson@nebraska.gov]; Prasai, Gyanendra [gyanendra.prasai@nebraska.gov]  
**Subject:** RE: NDEQ Ltr - NPPD's GGS Supplemental BART Assessment - DSI - RE: Mr. Reid's E-mail of 4-8-11

Please coordinate with Brad. My Wednesday is out completely. The 29<sup>th</sup> is a holiday for us.

Shelley Schneider  
 Nebraska DEQ  
 402-471-4299

For every 1lb of office paper recycled, 4 lbs CO2 are saved.

**From:** Citta Jr., Joseph L. [mailto:jlcitta@nppd.com]  
**Sent:** Tuesday, April 19, 2011 10:37 AM  
**To:** Schneider, Shelley; Reid, Brad  
**Cc:** Dodson, Joshua; Prasai, Gyanendra; Ringenberg, Jay; Linder, Mike  
**Subject:** RE: NDEQ Ltr - NPPD's GGS Supplemental BART Assessment - DSI - RE: Mr. Reid's E-mail of 4-8-11

Shelley: Due to the shortened holiday week I am having trouble getting people scheduled for a call this week. It may have to be early next week. How does your Monday, Tuesday or Wednesday look for next week?

Joe L. Citta Jr.  
 NPPD Corporate Environmental Manager  
 (402) 563-5355 / (402) 563-5168 fax  
 cell--(402) 910-8974



Please consider the environment before printing this email.

**From:** Schneider,, Shelley- NDEQ  
**Sent:** Tuesday, April 19, 2011 9:27 AM  
**To:** Reid,, Brad- NDEQ; Citta Jr., Joseph L.  
**Cc:** Dodson, Joshua; Prasai, Gyanendra; Ringenberg,, Jay- NDEQ; Linder, Mike  
**Subject:** RE: NDEQ Ltr - NPPD's GGS Supplemental BART Assessment - DSI - RE: Mr. Reid's E-mail of 4-8-11

Joe -

I want to re-affirm what Brad has said in this email.

The except below is taken from page 15 of the March 2008 revised BART analysis submittal NPPD provided to NDEQ, which has been included in the basis of the proposed SIP, as well as the proposed SIPs of other states. As you see, the basis from which we have been operating is that the baseline is 0.749 lb SO<sub>2</sub>/MMBTU. This 0.749 lbSO<sub>2</sub>/MMBTU baseline was determined per the BART rules. Based on the review and the information you provided, using a baseline of 1.72 lb SO<sub>2</sub>/MMBTU appears to have

increased the cost of using the DSI technology. Please let Brad know as soon as possible when you and your folks can visit this week, so we can get this wrapped up. Thanks.

### 2.2.2 SO<sub>2</sub> Control Technology Effectiveness

Effectiveness is measured by the amount of SO<sub>2</sub> removed by each control technology based on a comparison of the controlled emission rates to the uncontrolled baseline emission rate of the GGS1&2 units. Table 3 provides a summary of the SO<sub>2</sub> control technology effectiveness.

**Table 3**  
**SO<sub>2</sub> Control Technology Effectiveness**

Identified Control Technology	Emission Rate (lb/MMBtu)	Potential Emissions (tons/yr) <sup>A</sup>	Tons SO <sub>2</sub> Removed (tons/yr)
GGS1&2 Baseline	0.749	49,785	NA
Wet FGD	0.15	9,970	39,815
Dry FGD	0.15	9,970	39,815

<sup>A</sup> Based on maximum actual 24-hour emissions, maximum heat input of 15,175.5 MMBtu/hr and 100% capacity factor. Note that the potential tons/year value for the Baseline greatly overstates emissions levels (and hence impacts on downwind Class I areas) since it is calculated by using the maximum 24-hour emissions realized over the 3-year baseline period (2001-2003), at a 100% capacity factor. Thus, the tons/yr removed values and improvements in downwind Class I areas are also greatly overstated under this BART analysis.

Shelley Schneider  
Nebraska DEQ  
402-471-4299

For every 1lb of office paper recycled, 4 lbs CO<sub>2</sub> are saved.

-----Original Message-----

From: Reid, Brad  
Sent: Monday, April 18, 2011 3:55 PM  
To: Citta Jr., Joseph L.  
Cc: Schneider, Shelley; Dodson, Joshua; Prasai, Gyanendra  
Subject: RE: NDEQ Ltr - NPPD's GGS Supplemental BART Assessment - DSI - RE: Mr. Reid's E-mail of 4-8-11

Thanks for the information, Joe. As we talked on the phone, I'm sending you a few discussion topics/questions that we talk about on a conference call later. Primarily we

want to discuss the baselines used in the BART cost analysis and modeling analysis. What I understood from our brief conversation was that 1.7 lb-SO<sub>2</sub>/MMBtu was used as a baseline for the BART analyses, yet 0.749 was used as the modeling baseline. What doesn't seem to make sense is that in Exhibit 3 of the S&L report appears to show that the baseline of 0.749 was used for the scrubber baselines. For example, an emissions reduction of 39,000 tons of SO<sub>2</sub> for a Dry Scrubber (down to 0.15 lb/MMBtu) is not consistent with using a baseline of 1.7+, it is consistent with using a baseline of 0.7+.

1.7 lb/mmbtu \* 15,175 mmbtu/hr = 113,000 tpy uncontrolled SO<sub>2</sub> for both units.

0.749 lb/mmbtu \* 15,175 mmbtu/hr = 49,800 tpy uncontrolled SO<sub>2</sub> for both units

0.36 = 24,000 tpy SO<sub>2</sub>

0.15 = 10,000 tpy SO<sub>2</sub>

A reduction of 39,000 tpy SO<sub>2</sub> is realized when you drop from 0.749 down to 0.15. There is the confusion. It appears the baseline for the BART analysis is supposed to be 0.749 lb/MMBtu and represents the 2001-03 max 24-hr SO<sub>2</sub> emissions.

We also want to make sure we understand how much Trona you calculate needing (annual operating costs) to reduce emissions from 0.7+ down to 0.36 (~50% reduction).

Those are the main topics we need to discuss on the call. Let me know when we can get together to discuss. Thanks.

Brad Reid, Air Quality Division  
Nebraska Dept. of Environmental Quality  
(402) 471-4159 / 471-2909 fax

-----Original Message-----

From: Citta Jr., Joseph L. [mailto:jlcitta@nppd.com]

Sent: Friday, April 15, 2011 4:17 PM

To: Reid, Brad

Subject: NDEQ Ltr - NPPD's GGS Supplemental BART Assessment - DSI - RE: Mr. Reid's E-mail of 4-8-11

Importance: High

Brad: Attached is an electronic copy of the letter to you that I placed in the mail today. The letter is the reply to your DSI related questions contained in your 4/8/11 dated e-mail.

Please contact me with any questions you have.

Thanks!

Joe

Joe L. Citta Jr.

NPPD Corporate Environmental Manager

(402) 563-5355 / (402) 563-5168 fax

cell--(402) 910-8974

P Please consider the environment before printing this email.